MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2017/2018

BPB2034 – PROGRAMMING FOR BUSINESS APPLICATIONS

(All sections / Groups)

14 MARCH 2018 9.00 a.m – 11.00 a.m (2 Hours)

INSTRUCTION TO STUDENTS

- 1. This question paper consists of 4 pages (including cover page) with 4 questions only.
- 2. Attempt ALL FOUR questions. All questions carry equal marks and the distribution of the marks for each question is given.
- 3. Please print all your answers in the Answer Booklet provided.

Question 1 (25 Marks)

a) To solve business problems, programmer has to understand the steps in program development cycle. Briefly explain the 6 steps of program development cycle?

(6 Marks)

b) Lee and Lim are partners who are managing a store. 20% from total sales of the store is served as their bonus every month. Lee gets 60% while Lim gets 40% of the total bonus sum. On top of the bonus, Lee and Lim also get a fixed amount as basic salary each month. As the accountant of the store, you have been asked to monitor the bonus and total salary given to Lee and Lim.

To make your life easier, you need a simple VBA program which gets basic salary of Lee and Lim, and total sales of store then calculates bonus and total salary given to Lee and Lim. Apply your problem solving and programming skills to answer the questions below.

i. Determine the input, process and output for the given problem.

(6 Marks)

ii. Draw the flowchart to illustrate the programming algorithm for the given problem.
(13 Marks)

Question 2 (25 Marks)

a) MMU society is organizing a gathering in KL. All members are asked to sponsor a sum of money based on their own wills. As the working staff of registration counter, you have been asked to record participant's name and amount he/she had sponsored. Table 1 below shows all the name and sum of the participant for the gathering at the night.

Table 1

Amount (RM)
3000
4100
2800
1600
5500
4000

Continued...

Apply your problem solving and programming skills of looping and array to answer the questions below.

Write a simple VBA program which gets name and amount using input box then save into respective arrays. Finally, all the data in the array will be output to the excel spreadsheet.

(10 Marks)

b) What will be displayed when you run the program shown below?

(6 Marks)

Table 2
1. Sub Question2b()
2. Dim price(4) As Integer
3. Dim i As Integer
4.
5. $price(0) = 1000$
6. $price(1) = 2200$
7. $price(2) = 7000$
8. $price(3) = 0$
9. $price(4) = 6500$
10. i = 0
11.
12. Do While price(i) <> 0
13. MsgBox price(i)
14. $i = i + 1$
15. Loop
16. End Sub

c) Write a complete program that gets 2 numbers as input from input box, multiply them together and show the result in msgbox. If the input is not a number, the program should display "Error" in msgbox.

(9 Marks)

Question 3 (25 Marks)

PTPTN currently having a promotion to graduates for repayment. If a graduate repays the debt in one payment, they will have 20% discount. If a graduate repays the debt monthly by automatic salary deduction, 10% discount is offered to them.

Assume you are working as PTPTN counter registry. To make your life easier, you need a simple VBA program which gets balance debt of the graduate and type of repayment then calculate the final amount for them to pay if discount is applicable.

Continued...

Apply your problem solving and programming skills to answer the questions below.

a) Write a VBA function to calculate repayment if paid at one time.

(4 Marks)

b) Write a VBA function to calculate repayment by monthly salary deduction.

(4 Marks)

c) Write the complete VBA program to consider the repayment type and automate the final amount calculation process. Two functions created in (a) and (b) must be called in the program.

(17 Marks)

Question 4 (25 Marks)

Professional D.O.T.A gamers are streaming their gameplay online. Their streaming can be subscribed by paying a sum of money either hourly, daily or monthly. Hour charge for streaming viewing is RM2/hour while daily charge for streaming viewing is RM16/day. Viewer can choose to pay RM240 to view the streaming unlimited for 1 month.

Assume you are working as streaming platform operator. To make your life easier, you need a simple VBA program. The program should request for type of subscription and also the duration that viewer want then display the bills that viewer should pay.

You are required to apply the programming techniques and provide solution to this business problem. The following are expected.

a) Determine input, process and output for this problem.

(6 Marks)

b) Provide a programming logic to solve this problem in the form of a flowchart.

(8 Marks)

c) Write a visual basic code to get input from excel spreadsheet and display the results on a message box.

(11 Marks)

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